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ABSTRACT

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An optical communications receiver comprising a wide-band optical detector array and a high-speed digital signal processor programmed to operate on the raw data from the detector array to ameliorate the effects of atmospheric turbulence on the performance of the optical receiver in real-time while operating within the terrestrial atmosphere, or while attempting to communicate through any similar turbulent medium is provided. A method of sending optical communications through such optical communications receivers is also provided.

Approved for release